

improved storage and disposal facilities. In Alberta, the development of precision farming technologies will lead to a more effective and environmentally friendly application of herbicides and fertilizers. Also through the Green Plan, the federal government has established new projects to strengthen the national capacity to conserve plant and animal genetic resources.

Processors, grocery retailers, and the hotel, restaurant, and institutional sector are also addressing environmental issues. One major undertaking is the Canadian Industry Packaging Stewardship Initiative, a comprehensive packaging waste management process that focuses on reduction, re-use, and recycling. It is designed to support the industry and government commitment to minimize packaging waste.

Work has begun to improve the agriculture and agri-food sector's information base on environmental sustainability. Agri-environmental indicators will provide a capability for evaluating the sector's environmental performance, provide information on key trends, and facilitate the integration of environmental considerations into the sector's decision-making processes.

Several economic development programs also target environmental sustainability. In Manitoba, for example, the Partnership Agreement for Municipal Water Infrastructure for Rural Economic Diversification focuses on upgrading water and wastewater systems in rural communities in order to meet increased demands while preserving environmental quality.

Internationally, Canada is working to help other nations meet their Agenda 21 objectives. IDRC is supporting research on food systems in regions where problems of food insecurity, poverty, and environmental degradation are most urgent. Indigenous knowledge and coping mechanisms at the household level will be incorporated in efforts to find local sustainable solutions. For example, the use of natural biological pesticides, which can be made locally at little or no cost, has been identified as a key area of research.

CIDA has a number of projects in place promoting environmentally sound farming practices and rural economic diversification in developing countries. Much of this work is carried out through community-level education and the introduction of appropriate technologies.

## Challenges and Next Steps

The key decisions about investing in more environmentally sustainable practices are being made at the farm level. As such, it is the sector that must ultimately decide on how best to protect the resources upon which it relies and in so doing, minimize environmental degradation.

In order to address environmental issues in agriculture effectively, however, producers, processors, and governments must work together. The agriculture and agri-food industry will continue to improve its ability to self-regulate through initiatives such as environmental

*In Manitoba, alternative uses for crop residues, such as particleboard, energy sources, and agri-pulp for paper, are being investigated. Success in these projects will provide producers with an economic incentive to stop burning crop residues, with a net positive impact on air and soil quality.*